

The work is divided into two parts. The first general division embraces, 1st, a consideration of the hygienic influences of the atmosphere; 2d, those influences which are adapted to weaken or favour the effects of atmospheric agents, as abode, dress, bathing; 3d, aliments and drinks; 4th, secretions and excretions; 5th, muscular movements or exercises, and the conditions of repose and sleep; 6th, sensations and the intellectual passions and functions; 7th, the means by which education exerts its influence, including habit, imitation, curiosity, emulation, rewards, encouragements, and punishments; 8th, the duties of the physician attached to institutions for education.

The second general division is devoted to the consideration of diseases most frequent in youth: 1st, those of the lymphatic system; 2d, those of the sanguineous system; 3d, those of the nervous system; 4th, affections of divers natures. Many other topics are treated at considerable length, and in general with much good sense.

The book is deserving the attention of those engaged in the education of youth, to whom it cannot fail to supply many valuable hints and much useful instruction; but the utility of the treatise, is not confined solely to those who have the charge of seminaries of learning; it embraces a full view of the physical education of youth, and may therefore be consulted by parents with advantage.

G. E.

XXVII. Precis Physiologique sur les Courbures de la Colonne Vertébrale, ou Exposé des Moyens de Prévenir et de Corriger les Difformités de la Taille, Particulièrement chez les Jeunes filles, sans le secours des lits Méchanique a Extension. Par. C. LACHAISE, M. D. P. &c. &c. Avec six planches. Paris, Vil-
leret & Co. 1827. pp. 200.

In Europe, as in this country, medical men are greatly divided in opinion as to the comparative merits of the two kinds of treatment of serpentine curvatures of the spine. While some depend almost exclusively on mechanical means, others denouncing them as highly detrimental, and altogether useless, resort as exclusively to measures corroborative of the general health of the body, and to exercises which strengthen either a part or the whole of the muscles of the spine and trunk. M. Lachaise, although disposed to favour the latter plan of treatment, occasionally adopts mechanical suspension. It cannot be doubted that he who avails himself of the resources of both parties, will soonest obtain, for his patients, that health, and beauty of figure, so desirable for those who are usually the subjects of lateral curvature.

M. Lachaise claims the merit of having, in a formal manner, stated the distinction between the two kinds of spinal curve. The first produced by an irregular action of the muscles; the second by an essential alteration of the parts which compose the vertebral column. The first class he divides into several species: the right cervico-dorsal curvature, the left cervico-dorsal, the lateral dorso-lumbar, the backward convex curve, and the hollow back, or anterior curve. Besides these he has also classified the cervical curves.

As his plan of treatment consists mainly in strengthening by varied exercises those muscles which, according to his views, yield to more potent antagonists, his subdivisions are useful for the direction of the treatment.

For the right cervico-dorsal curvature, he suggests the use of the winch, placed very high, and rendered somewhat difficult to move. A similar mode of treatment will, according to our author, efface the left cervico-dorsal curvature.

The lateral dorso-lumbar curve has been, by the most able writers, ascribed to the too great force of the muscles attached to the convex side of the curve; and they have of course recommended the promotion of the muscular energy on the concave side. On this point our author's views are original. He believes that this curve is produced by the muscles of its concave side, which draw down the chest towards the pelvis; and he, consequently, advises the *corroboration of the muscles of the convex side*. This he effects by causing a weight to be carried in the hand of the concave side, so as to produce a leaning to the opposite side.

When the back is convex he makes his patient walk down inclined planes; and when concave, the ascent is recommended. Curvatures of the neck are treated by M. Lachaise on similar principles, and, as he states, with much success.

Of the various forms of curvature, our author esteems the anterior the most rare, and the most difficult to cure.

We are not among those who believe that exercises alone, however well-designed, will correct any spinal deformity, and we therefore regret that our author has not appealed to cases authenticated by others, for the proof of the excellency of his plan; as nothing short of such facts, so confirmed, could shake our faith in the efficacy of another practice. In truth we believe that the spine becomes curved through bad posture during hours of muscular *rest, often repeated, and long continued*. The muscles and ligaments differ finally, not in strength, but in length; and it is only by reversing or correcting position, by both volition and machinery, that we can rationally hope to cure lateral curves of the spine. If inequality of muscular force caused curvatures, the blacksmith and the weaver would seldom continue straight, for they exercise, almost exclusively, the muscles of the right side of the trunk. Those who have seen many cases of this disease know that it affects chiefly *females*, and that many of its subjects are robust and healthy, some of them eminently so. The pursuits and pastimes of boys produce every variety of posture, while nearly all the amusements and studies of girls are of a quiet nature, and are pursued in a common attitude. Hence the greater frequency of curvature in them, and the general resemblance in the direction of that curvature.

We join heartily with our author in his condemnation of the mechanical couches of the Maisons de Santé, and believe, with him, that the corsets and rod of Levacher, now known as the *Minerva brace*, injure the health by compressing the chest and abdomen. When machines are used, let them tie down no muscle, confine no organ so as to impair its function, and let them, if possible, admit of free exercise, and easy locomotion. In fine, while efforts are made, both by instruments and muscular training, to restore a natural shape, and to keep the form correct, until the muscles and ligaments become of equal length, let nothing be done to divest the patient of that general vigour, which lateral curves frequently leave undiminished.

J. K. M.